

Claims

- 1 1. Method to reduce coding artefacts within a discrete decoded picture, **characterized by** a spatial and/or temporal filtering with respective filter characteristics dependent on an image quality value (Q).
- 5 2. Method according to claim 1, **characterized in that** said spatial filtering includes a deblocking filtering, wherein the deblocking filter operation decreases with an increasing image quality value (Q).
- 10 3. Method according to claim 2, **characterized in that** said deblocking filtering chooses an activity-dependent weighting function for a pixel to be filtered according to a image quality value (Q), wherein the activity of both blocks to which common border said pixel belongs is considered.
- 15 4. Method according to claim 3, **characterized in that** said weighting function is only applied to said pixel to be filtered if a blocking artefact is detected.
- 20 5. Method according to anyone of claims 2 to 4, **characterized in that** said deblocking filtering is performed separately for horizontal and vertical borders of neighbouring blocks.
- 25 6. Method according to anyone of the preceding claims, **characterized in that** said spatial filtering includes a deringing filtering, wherein the deringing filter operation decreases with an increasing image quality value (Q).
- 30 7. Method according to claim 6, **characterized in that** said deringing filtering chooses a image quality value (Q) dependent deringing mask for a pixel to be filtered.
8. Method according to claim 7, **characterized in that** said deringing mask is only applied to said pixel to be filtered if said pixel belongs to a homogeneous area.
9. Method according to anyone of claims 6 to 8, **characterized in that** said deringing filtering is a two dimensional filtering taking only neighbouring pixels of said pixel to be filtered into account which belong to a same region.

- 1 10. Method according to anyone of the preceding claims, **characterized in that** the temporal filter operation decreases with an increasing image quality value (Q).
- 5 11. Method according to claim 10, **characterized in that** the temporal filter operation is realized with a blending filter applied to an entire frame which determines a new frame as a weighted sum of a predicted frame and an actual frame, which weighting is dependent on said image quality value (Q) and a difference of the actual frame with the predicted frame.
- 10 12. Method according to claim 11, **characterized in that** said predicted frame is determined on basis of a motion compensation of a previously determined new frame.
- 15 13. Method according to anyone of the preceding claims, **characterized in that** said image quality value (Q) is determined based on a quantization scaling factor (M_{Quant}) used for encoding the picture.
- 20 14. Method according to anyone of the preceding claims, **characterized in that** said image quality value (Q) is determined based on a user selection.
- 25 15. Method according to anyone of the preceding claims, **characterized in that** said discrete encoding/decoding of the picture is based on a discrete cosine transform.
- 30 16. Method according to anyone of the preceding claims, **characterized in that** said discrete encoding/decoding of the picture is based on a MPEG coding scheme.
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